A cross sectional study to Assess Pattern & prevalence of substance abuse among adolescents in union territory of Jammu & Kashmir; Special focus on opioids.

A

Synopsis

Submitted To

DESH BHAGAT UNIVERSITY, MANDI GOBINDGARH

In partial fulfilment of the Requirement for the Award of the Degree of

DOCTOR OF PHILOSOPHY

In the Field of

Nursing

Supervisor:

Dr. Jubin varghese

Associate Professor

Submitted by:

Ms. Batula Rashid

21RCPHDNU020

DESH BHAGAT UNIVERSITY, MANDI GOBINDGARH

PUNJAB 2022

1. I am willing to guide the research work of **Ms Batula Rashid** on the above subject if she is registered for Ph.D.

2. To the best of my knowledge the subject selected for research has not been studied and is not being studied so far in any of the University.

3. The Subject is of sufficient scope to keep the candidate engaged for two years.

4. The subject will lead to the valuable contribution in the respective field of knowledge. I have seen and approved the Synopsis and bibliography, etc. submitted by the candidate.

5. Necessary facilities are available in the Department for the above research work (Certificate from Principal/Head University Department with regards to facilities available is enclosed.)

6. I have_____ research candidate registered under my Supervision and the serial number of this candidate whose application being forwarded for registration is _____.

7. The candidate is not in a close relation (the term close relation is defined in the Examination Ordinance of the University).

Supervisor
Dr. Jubin varghese

This is certified that the available facilities will be extended to the candidate for research work if he / she is registered for the Ph.D.

Signature of the Principal/Director
of the Institution with date

Synopsis for registration of topic for Ph.D. Thesis

1.	**Name of Candidate & Address**	Ms. Batula rashid, D/O Ab Rashid Drangbal Pampore, P.O Pampore Distt. Pulwama, Kashmir.
2.	**Name Of Faculty /Discipline**	Ph.D in Nursing (Mental Health Nursing)
3.	**Title Of Research**	**A cross sectional study to Assess Pattern & prevalence of substance abuse among adolescents in union territory of Jammu & Kashmir; Special focus on opioids.**
4.		**a) Does the study require an investigations or interventions to be conducted on patients or humans or animals? If so, please describe briefly.** • The study will be conducted among adolescent population but does not require any human intervention. **b) Has ethical clearance been obtained from your institution?** • Yes, informed consent will be obtained from the adolescents. • Privacy, confidentiality and anonymity will be guarded. • Ethical clearance will be obtained from institutional ethical committee.
5.		**Signature of the Candidate: _____** **Place:_____** **Date:_____**

6.		**Remark of the Supervisor :** **_____** **_____** **__** **Signature: _____** **Name:** **_____** **Designation: _____** **Date: _____** **Place: _____**
7.		**Remark of the Departmental Research Committee:** **_____** **_____** **__** **Signature: _____** **Name: _____** **Designation: _____** **Signature: _____** **Name: _____** **Designation: _____** **Signature: _____** **Name: _____** **Designation: _____**

1. Introduction:

Disorders related to substance use are a serious and pervasive public health concern. Some narcotics, like marijuana and alcohol, have been used in India for millennia due to the acceptance they have received from local, religious, and cultural groups (1). While alcohol and tobacco are often used in India, a new issue for policymakers is the use of illicit narcotics, notably opioids like heroin (2). The Ministry of Social Justice and Empowerment of the Government of India recently conducted a nationwide study, and found that heroin was the opioid that was most often used, with a prevalence of current use of any opioid at 2.06% (3). (4). The greatest prevalence rates for opioid use in terms of population percentage are found in Mizoram (6.9%), Nagaland (6.5%), Arunachal Pradesh (5.7%), Sikkim (5.1%), Manipur (4%), and Punjab (2.8%), according to data from the National Drug Dependence Treatment Centre (NDDTC). More than half of all opioid instances are found in states like Uttar Pradesh, Punjab, Haryana, Maharashtra, Madhya Pradesh, Delhi, and Andhra Pradesh because of their large populations. In J&K, 600,000 people, or around 5% of the population, used drugs, according to a poll published in February 2019 by the National Drug Dependence Treatment Centre (NDDTC) of the All-India Institute of Medical Sciences. The research found that 4.91% of adults take opioids and that 0.62 percent become dependent on them (5). (6).

The geographic position of Jammu and Kashmir makes straightforward drug trafficking inside the state possible. Drug abuse has increased as a result of the ongoing socio-political instability in Kashmir (7). (8). The most urgent problem facing Kashmir in recent years has been Opioids use. 2.8% of Kashmir's population, 52,404 people who are now drug dependant, 25% of jobless young who engage in substance abuse, and addicts who spend 88,000 rupees a month on Opioids , according to a news article from July 11 to August 20, 2022. As well as the discovery of significant quantities of opioids, mainly heroin, in northern border areas, there is an increasing quantity of information being published in the media concerning the extensive cultivation of opioids in Kashmir Valley (9) (2) (10).

Need of the study:

Due to the many aspects of drug use and how they are interrelated, the problem is multifaceted (11). Numerous research have shown that areas with active conflicts have higher rates of drug use issues; nevertheless, data on Kashmir is surprisingly few. Over the last several decades, many natural disasters, such as floods, earthquakes, and snowstorms, have compounded this, further deteriorating the inhabitants' psychological circumstances (12). (13). The Union Territory of Jammu and Kashmir's first comprehensive research to look at the prevalence of

drug usage nationally (J & K). The findings, however, may not provide an accurate picture of Kashmir since that area has faced several stresses, such as war and the aforementioned natural catastrophes, whereas Jammu and Ladakh and other regions of the state have mostly escaped them (12)(14). (7).

The number of patients seeking treatment at the main rehabilitation facility in Srinagar has increased by 2660% during 2016, with heroin and Opioid addiction accounting for the majority of cases. According to news sources, there were 489 patients registered at IMHANS in 2016 and 7,420 in 2019 (2). (15).

Kashmir differs from the other two state regions regarding sociocultural and physical elements crucial for developing and treating drug use disorders. The country's drug landscape has changed dramatically over the last few decades. The availability, choice of psychoactive substances, users, and sociodemographic features have all changed (14)(11). In the previous two decades, the prevalence of drug usage has increased throughout many societal groups, alarmingly raising tensions (2) (9). Researchers in Kashmir have ignored the notion that there is a bidirectional association between substance abuse and other mental illnesses. This study points to a complicated interplay between various variables that lead to teenage drug usage. It also describes the different risk factors leading to substance abuse especially Opioids and the pattern of drug abuse among respondents.

Since there have been anecdotal reports showing an alarming surge in the opioid issue in the valley, we believed that it was necessary to research the prevalence and pattern in Kashmir valley with a specific focus on opioid users, especially Injection drug users. We also wanted to examine how often respondents used injections. (16).

Although demographic or general household surveys are seen to be the most direct means of estimating the prevalence of certain diseases; these approaches are not generally accepted for estimating the use of illegal substances since their use is so stigmatised. [10] As a result, indirect approaches like the benchmark multiplier method (BMM), which will be used in this research, are often used to estimate the population size of drug users.

2. Statement of the Problem

A cross sectional study to Assess Pattern & prevalence of substance abuse among adolescents in union territory of Jammu & Kashmir; Special focus on Opioids.

2.1 Aim of study: to determine Pattern & prevalence of substance abuse among adolescents in union territory of Jammu & Kashmir especially Opioids

Objective

1. To identify the commonly abused substances among adolescents in union territory of Kashmir.
2. To assess the Pattern & prevalence of abused substances among adolescents in union territory of Kashmir
3. To assess the Pattern & prevalence of opioids among adolescents in union territory of Kashmir

2.3 Operational definitions:

Prevalence: It relates to the fact that substance abuse often occurs or is quite common.

Pattern: It relates to the frequency of substance abuse occurrence by a person, location, and time. It might be hourly, daily, weekly, monthly, yearly, seasonal, workday vs weekend, or any other division of time that may affect the likelihood of a person.

Substance Abuse: it refers to the use of Opioids, conventional pharmaceuticals, or over-the-counter medications for reasons other than those for which they were intended, or in excess

Substance Abuser: A person who has taken drugs during the Six months is considered a user.

2.4 Assumptions:

- There is high prevalence of various substances that are being abused by adolescents in union territory of Kashmir.
- Opioid is one of the most commonly abused substance among adolescents in union territory of Kashmir

2.5 Delimitations: Due to vast geographical area of Jammu & Kashmir, the research would be confined only to the union territory of Kashmir

3. REVIEW OF LITERATURE

Literature review is an essential source to critically synthesise the existing knowledge in the subject under examination, highlighting any strengths and limitations in earlier work, therefore assisting you to detect them in your own research and so avoid the possible deficiencies. A literature review is an account of what has been written on a subject by qualified academics and researchers. It is an account of what is already known about a certain phenomenon.

The literature has been arranged as following:

3.1 International:

- **Rehema A. Mavura 2022,** conducted a cross sectional study on Prevalence of substance use and associated factors among secondary school adolescents. The study results revealed that Alcohol and opioids were frequently abused substance, with lifetime drug use prevalence among 3224 teenagers being 19.7% and 12.8%, respectively (17).
- **Erica C. Blustein et al, 2022** conducted a cross sectional study on Association of Low Parental Monitoring With Substance Use among 3133 European American and 523 African American Adolescent Girls. The study results revealed that Compared to AA girls, EA girls had a higher likelihood of early alcohol use, whereas AA girls were more likely to report having less parental supervision. Both logistic regression and propensity score analyses confirmed that EA girls who had less parental supervision were more likely to start using alcohol, cigarettes, and cannabis at a young age. For AA girls, there was less conclusive evidence about links between limited parental supervision and risk for early drug use (18).
- **Jasmin Carmonaa et al 2020**, conducted a study on Prevalence and health characteristics of prescription opioid use, misuse, and use disorders among US adolescents. Results revealed that among teenagers, hydrocodone, codeine, oxycodone, and other opioids were the most often utilised prescription opioids. Comparatively many opioid abusers also have alcohol use disorders and cannabis use disorders. Demographics, other drug usage, lifetime medical problems, major depressive episode, and survey year were all revealed to be correlates with opioid use, nonmedical prescription opioid use, prescription opioid use disorder (19).
- **Dušica B Rakić, 2017** conducted a cross-sectional study on the prevalence of substance use among 594 adolescents. Results revealed that Males had a significantly greater rate of drug usage. 21.45% of men and 15.67% of women smoked cigarettes every day (p 0.01), 81.6% of men and 69.11% of women used alcohol every day (p 0.001), and 13.65% of men and 8.30% of women used illegal substances every day (p 0.05). Adolescents who performed poorly in school (p 0.01), who had a dysfunctional household (illegal substances, p 0.01), and who had more pocket money (cigarette smoking, p 0.01, and opioid consumption, p 0.5) had significantly greater rates of substance use (20).

3.2 National:

- **Aditi Nath et al 2022;** conducted a cross sectional study among 400 adolescents 15 villages of Jalandhar District Punjab, India. The prevalence of substance abuse among study group was 65.5% and most common substance abused was alcohol (41.8%), followed by tobacco (21.3%). A high prevalence of heroin abusers was noted among study subjects (20.8%). The prevalence of non-alcohol and nontobacco substance abuse was 34.8% (21).
- **Shobhit Srivastava 2021; conducted a study on, "**Does substance use by family members and community affect the substance use among adolescent boys? in India". We discovered that 16% of teenage guys used any kind of drug (tobacco or alcohol or drug). Adolescent males who dropped out of school had a 40% greater rate of drug use than those who were still enrolled in school. Additionally, a significant frequency of drug use (35%) was seen among individuals who were employed. Additionally, 19, 24, and 28% of the teenagers came from households where at least one person has used cigarettes, alcohol, or drugs, respectively. Teenage males who had family members who used drugs had a 2.13 times [CI:1.44-3.17] greater chance of using drugs themselves. Moreover, among the teenage males from high drug use communities, the chance of substance use was 1.24 times [CI:1.01-1.68] greater. Additionally, teenage guys who live in the same home and belong to the same neighbourhood are more prone to take drugs (22).
- **Raj Narain et al 2020;** conducted a cross sectional study on Prevalence and risk factors associated with substance use among school children: A questionnaire-based survey in two cities of Uttar Pradesh, India. 14.3% of students reported having used alcohol or cigarettes at least once, and the percentage was 1.2 times higher in males than in girls (P 0.05). The practise was started by around 29.5% of these pupils before the age of 11, and it was far more common in males attending government schools than in boys attending private schools. If the student's parents, siblings, or friends also used drugs, the behaviours were 2.2, 3.8, or 4.6 times more prevalent. Children with white-collar fathers and highly educated parents used drugs less often. Up to one-third of the class developed the practise of making acquaintances (23).

3.3 Local:

- **Yaseen et al 2020;** conducted a study on prevalence of substance use and dependence in two districts of Union Territory of Jammu & Kashmir among adolescents. The study concluded that any drug dependency was predicted to be 1.95% prevalent, and opioid

dependence was 1.80% prevalent. The most popular opioid last year was heroin, which was used by 84.33% of respondents. Injection drug users (IDUs) use heroin more often than any other opioid, at 91.12%, followed by pentazocine (5.92%), according to the current prevalence of 0.95% (6).

4. RESEARCH METHODOLOGY

5.1 Research approach: Quantitative approach will be adopted for this study.

5.2 Research design: Cross sectional study design will be selected for the present study

5.3 Variables

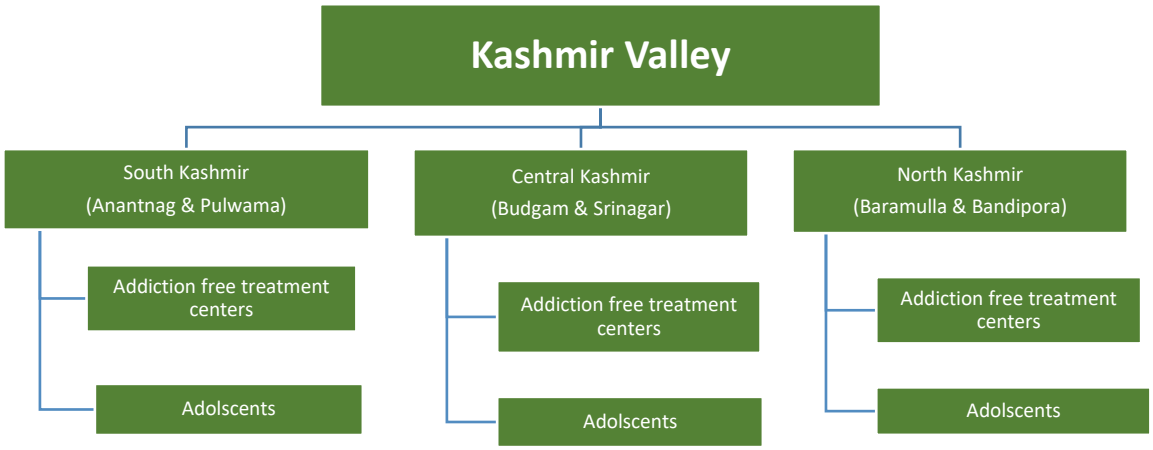
- **Research variable:** Pattern & prevalence of substance abuse among adolescents

5.4 Method of data collection: Data will be collected by using interview and questionnaire method.

5.6 Sample size: Sample size of adolescents will be calculated by using the 'sample size determination in health studies' software of World Health Organization. Prevalence of substance abuse among adolescents in Kashmir will be used to calculate the sample size (6). At confidence level of 95% and bound on the error of 5%, taking the prevalence of substance abuse in Kashmir; by using formulae $n = \frac{\mathrm{Z2P(1-P)}}{\mathrm{d2}}$ +10% attrition

5.7 Sampling technique: Systematic sampling (probability proportionate to size will be used for the selection of study subjects.

5.8 Setting: This will be a multistage cross sectional prevalence study, which will be done in Kashmir as per following study design. Kashmir Division currently consists of ten districts. We will randomly select two districts from Central Kashmir (Budgam & Srinagar), South Kashmir (Anantnag, Pulwama) and North Kashmir (Baramulla & Bandipora). We will select all clusters (Addiction free treatment centres) from each district. 100 adolescents will be randomly selected from each cluster (AFTC). Adolescents will be selected on the bases of Prevalence of substance abuse in Kashmir Valley.



Instrument:

- **Semi-structured proforma**: This asks about sociodemographic details, effects of drug use, and injecting drug user's behaviour, including complications.
- The Drug Abuse Screening Test (DAST-10) is a 10-item brief screening tool that can be administered by a clinician or self-administered. Each question requires a yes or no response, and the tool can be completed in less than 8 minutes. This tool assesses drug use, not including alcohol or tobacco use, in the past 12 months.
- The Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) by WHO: The ASSIST is an eight-item questionnaire administered by a clinician or self-administered regarding nine types of psychoactive drugs. It asks if a drug has been used in the previous three months or over the course of a lifetime.

Criteria for sample selection:

- **Inclusion criteria:** Adolescents (10-19 years) who are willing to participate in the study
- **Exclusion criteria:** Adolescents (10-19 years) who are not available during data collection.

5.9 Plan for data analysis;

Data collection and analysis: Data will be collected by interview schedule. Data will be analysed using licensed software of Statistical Package of Social Sciences (SPSS version 16). Descriptive statistics of socio-demographic variables will be computed as mean, standard deviation or frequency percentages. Pattern and Prevalence will be estimated for presence of Substance abuse by calculating the frequency percentages of the occurrence of symptoms and

illnesses in the sample. ANOVA test will be done for testing difference in pattern and prevalence of opioid abuse.

Timeline: Timeline: After permission from all settings, Everyday from10-20 respondents data will be collected.

Activity	**Months**										
	1-2	3-4	6-8	9-11	12-14	15-17	18-19	20	21-22	23	24
Permission from all Settings											
Data collection at District Pulwama											
Data collection at District Anantnag											
Data collection at District Srinagar											
Data collection at District Budgam											
Data collection at District Bandipora											
Data collection at District Baramulla											
Data cleaning											
Analysis and interpretation of data											
Submit summary findings.											

Reference:

1. Shoib S, Mushtaq R, Jeelani S, Ahmad J, Dar MM, Shah T. Recent trends in the sociodemographic, clinical profile and psychiatric comorbidity associated with posttraumatic stress disorder: a study from kashmir, India. J Clin Diagn Res [Internet]. 2014 Apr 15 [cited 2022 Dec 14];8(4):WC01-6. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/pmid/24959502/?tool=EBI

2. Housen T, Lenglet A, Shah S, Sha H, Ara S, Pintaldi G, et al. Trauma in the Kashmir Valley and the mediating effect of stressors of daily life on symptoms of posttraumatic stress disorder, depression and anxiety. [cited 2022 Dec 14]; Available from: https://doi.org/10.1186/s13031-019-0245-6

3. A Ambekar , A Agrawal, R Rao, AK Mishra , SK Khandelwal RC. Ministry of Social

Justice and Empowerment Magnitude of Substance Use. 2019;1–88. Available from: https://www.muktangan.org/pdf/Magnitude_Substance_Use_India_REPORT.pdf

4. Das JK, Salam RA, Arshad A, Finkelstein Y, Bhutta ZA. Interventions for Adolescent Substance Abuse: An Overview of Systematic Reviews. J Adolesc Heal. 2016;59(2):S61–75.

5. Gray KM, Squeglia LM. Research Review: What have we learned about adolescent substance use? J Child Psychol Psychiatry Allied Discip. 2018;59(6):618–27.

6. Rather YH, Bashir W, Ahmad Sheikh A, Aamin M, Arafat Zahgeer Y. Socio-demographic and clinical profile of substance abusers attending a regional drug de-addiction centre in chronic conflict area: Kashmir, India. Malaysian J Med Sci. 2013;20(3):31–8.

7. Firdosi M, Muzamil M, Malik Y, Rather Y. TREATMENT SEEKING POST TRAUMATIC STRESS DISORDER PATIENT POPULATION--EXPERIENCE FROM KASHMIR [Internet]. [cited 2022 Dec 14]. Available from: https://www.academia.edu/21332966/TREATMENT_SEEKING_POST_TRAUMATIC_STRESS_DISORDER_PATIENT_POPULATION_EXPERIENCE_FROM_KASHMIR

8. Mushtaq R, Shah T, Mushtaq S. Post-traumatic Stress Disorder (PTSD) in Children of Conflict Region of Kashmir (India): A Review. J Clin Diagn Res [Internet]. 2016 Jan 1 [cited 2022 Dec 14];10(1):VE01. Available from: /pmc/articles/PMC4740687/

9. Amin U. Post Traumatic Stress Disorder (PTSD) in children of Kashmir and role of nurse. Indian J Psychiatr Nurs [Internet]. 2017 [cited 2022 Dec 14];14(1):37. Available from: https://www.ijpn.in/article.asp?issn=2231-1505;year=2017;volume=14;issue=1;spage=37;epage=40;aulast=Amin

10. North CS, Smith EM, Spitznagel EL. Posttraumatic stress disorder in survivors of a mass shooting. Am J Psychiatry. 1994;151(1):82–8.

11. Ahmad Wani I, Singh B. Mental Health and Cannabis Abusers of Kashmir Valley. J Psychol Psychother. 2017;07(02).

12. Malla MA. Substance Abuse And Mental Health Disorder Among The Youth Living In Conflict Environment. J Ment Heal Issues Behav. 2021 Sep 2;(11):12–22.

13. Yaqoob A, Ashraf S. Pattern and prevalence of substance abuse in Kashmiri population: a review. Int J Adv Med. 2022;9(2):190.

14. Azim H. Case studies of drug abused youth of Kashmir valley. 2019;5(1):78–81.

15. Haidary AS. Socioeconomic factors associated with opioid drug use among the youth in Kabul, Afghanistan.

16. Amin UA, Parveen AP. Impact of COVID-19 on children. Middle East Curr Psychiatry. 2022 Dec 1;29(1).

17. Nawi AM, Ismail R, Ibrahim F, Hassan MR, Manaf MRA, Amit N, et al. Risk and protective factors of drug abuse among adolescents: a systematic review. BMC Public Health. 2021;21(1):1–15.

18. Blustein EC, Munn-Chernoff MA, Grant JD, Sartor CE, Waldron M, Bucholz KK, Madden PA, Heath AC. The Association of Low Parental Monitoring With Early Substance Use in European American and African American Adolescent Girls. J Stud Alcohol Drugs. 2015 Nov;76(6):852-61. doi: 10.15288/jsad.2015.76.852. PMID: 26562593; PMCID: PMC4712655.

19. Carmona J, Maxwell JC, Park JY, Wu LT. Prevalence and Health Characteristics of Prescription Opioid Use, Misuse, and Use Disorders Among U.S. Adolescents. J Adolesc Health. 2020 May;66(5):536-544. doi: 10.1016/j.jadohealth.2019.11.306. Epub 2020 Jan 19. PMID: 31964613; PMCID: PMC7359040..

20. Rakić DB, Rakić B, Milošević Z, Nedeljković I. The prevalence of substance use among adolescents and its correlation with social and demographic factors. Vojnosanit Pregl. 2014 May;71(5):467-73. PMID: 26137712.

21. ,Chavan, Bhagyshri & Garg, Rohit & Das, Subhash & Puri, Sonia & Banavaram, ArvindAnniappan. (2019). Prevalence of substance use disorders in Punjab: Findings from National Mental Health Survey. Indian Journal of Medical Research. 149. 489. 10.4103/ijmr.IJMR_1267_17.

22 Srivastava, S., Kumar, P., Rashmi et al. Does substance use by family members and community affect the substance use among adolescent boys? Evidence from UDAYA study, India. BMC Public Health 21, 1896 (2021). https://doi.org/10.1186/s12889-021-11911-5

23. Narain R, Sardana S, Gupta S. Prevalence and risk factors associated with substance use in children: A questionnaire-based survey in two cities of Uttar Pradesh, India. Indian J Psychiatry. 2020 Sep-Oct;62(5):517-523. doi: 10.4103/psychiatry.IndianJPsychiatry_595_19. Epub 2020 Sep 30. PMID: 33678832; PMCID: PMC7909022.